



Bayside Medical Group, Inc.

www.baysidemed.com

PEDIATRICS
ASTHMA BASICS

Asthma: The Basics

What is asthma?

Asthma is an extremely common condition that affects up to one in six children. The cause of asthma is unknown. As with many conditions, the causes are likely a combination of inherited and environmental factors.

The main problem with asthma is that the airways in the lungs get very narrow, which makes it hard to breathe. There are three basic reasons that the airways become narrowed:

- *Bronchospasm* – The airways are lined with muscle and tissue, and in asthma these muscles (especially in the small airways deep inside the lungs) go into “spasm”, which constricts the airways.
- *Inflammation* – The airway tissue lining becomes inflamed and swells, causing more narrowing.
- *Mucus* – When the airways become inflamed, they also produce mucus, which gets inside the airways and obstructs air flow.

What are the symptoms of asthma?

The hallmark of asthma is wheezing. Wheezing is a musical, whistling sound made by the air as it flows through the narrowed airways. Wheezing is best heard with the use of a stethoscope, but can also be heard at times by just listening closely. With asthma, it becomes hard to exhale, even if inhaling goes well. Coughing is also prominent in asthma, and when it is more severe, shortness of breath and tightness of the chest occur. In the midst of an asthma attack you can sometimes see the chest move in instead of out during breathing, which is called having “retractions” – either beneath the rib border, in the spaces between the ribs, or just above the sternum.

In severe asthma, the air exchange of breathing can be so bad that the patient actually starts to turn blue. A child may have difficulty speaking and may become very anxious, or very tired.

These signs and symptoms constitute a severe emergency.

What triggers an asthma attack?

Asthma attacks can be triggered by many different things. These include colds, exercise, allergies, pollution, and irritants such as tobacco smoke.

What increases your child’s risk for asthma?

If you or other members of your family have asthma, your child may be at risk. Childhood eczema and allergies also increase the risk for asthma.

What are possible complications of asthma?

Untreated asthma can eventually lead to “remodeling” (stiffening) of the airways and airway damage. Severe asthma attacks can get so bad that children need to be hospitalized. However, children who are properly treated can be *completely* controlled and lead a normal life, including active sports participation.

How is asthma treated or prevented?

As medical professionals, our job is to work with you to prevent attacks and to treat symptoms. There are two important parts of a successful asthma treatment plan. One is to avoid the things that trigger your child’s asthma. This includes avoiding colds, allergens, and irritants like tobacco smoke. And since influenza (the flu) can trigger asthma, getting a flu vaccine each year is very important.

The other part of an asthma plan is to use the right medications, which will depend upon the frequency and severity of the symptoms. We will work with you, and see your child regularly to assess and maintain optimal control.

For more information about asthma, and for additional Bayside asthma handouts, go to our website, www.baysidemedical.com, and click on “Health Library” then “Asthma”.

We pledge not only to care for you, but to care about you.